## Amendments to the Claims:

Please cancel claims 21-22, without prejudice or disclaimer.

Please amend the claims as shown below. This Listing of Claims will replace prior versions, and listings, of claims in the application.

## Listing of Claims:

- (Withdrawn) A probe carrier having immobilized thereto a probe that is specifically bindable to a target substance, the probe being immobilized to the carrier through the following substances:
  - a) a linker bound to the probe:
  - b) a first functional group bound to the linker; and
  - c) a second functional group bound to the first functional group, wherein a combination of the first functional group and the second functional group comprises an acidic functional group and a basic functional group.
- (Withdrawn) The probe carrier according to claim 1, wherein the
  combination of the first functional group and the second functional group
  comprises an acidic functional group having a dissociation constant of 1.0

   10-12 or more and a basic functional group having a dissociation
  constant of 1.0 10-6 or more.
- (Withdrawn) The probe carrier according to claim 1, wherein the probe comprises an oligonucleotide or a nucleic acid.

- (Withdrawn) The probe carrier according to claim 3, wherein the oligonucleotide or the nucleic acid has the linker at a 3'-terminal or a 5'terminal thereof.
- (Withdrawn) The probe carrier according to claim 1, wherein the linker comprises a methylene chain or a polyether chain.
- (Withdrawn) The probe carrier according to claim 1, wherein the acidic functional group is a mercapto group and the basic functional group is an amino group.
- (Withdrawn) The probe carrier according to claim 1, wherein the basic functional group is one selected from the group consisting of a primary amino group, a secondary amino group, and a mixture thereof.
- (Withdrawn) The probe carrier according to claim 1, wherein the probe
  has a second functional group introduced by treatment of the solid phase
  carrier with a silane coupling agent.
- (Withdrawn) The probe carrier according to claim 8, wherein the solid phase carrier is one selected from the group consisting of glass, quarts, silica, and a mixture thereof.
- 10. (Withdrawn) The probe carrier according to claim 1, wherein the combination of the first functional group and the second functional group is a combination that causes shift of mutual chemical shifts of signals in the NMR spectrum by binding each other.
- 11. (Withdrawn) A detection method comprising the steps of: imparting an analyte containing a substance to be detected to a probe carrier according to claim 1; and detecting the substance to be detected in the analyte bound to the probe carrier.

- (Withdrawn) A detection apparatus using a detection method according to claim 11.
- (Withdrawn) An apparatus for producing a probe carrier according to claim 1.
- 14. (Currently Amended) A method of <u>producing a probe carrier having</u> immebilizing a probe that is specifically bindable to a target substance <u>on</u> a surface of a substrate te a selid phase earrier, comprising the steps of:

providing a solution containing a probe having a linker containing a first functional group and a silane coupling agent containing a second functional group onto the surface of the substrate as droplets by an inkiet method; and

providing an immobilization substrate having a second functional group;

immobilizing imparting the probe to the immobilization on the surface of the substrate, ; and

binding the first functional group of the probe and the second functional group of the immobilization substrate to each other,

wherein the surface of the substrate comprises one selected from the group consisting of glass, quartz, silica and a mixture thereof, and

wherein a combination of the first functional group and the second functional group comprises an acidic functional group and a basic functional group, and the first functional group and the second functional group are in the state of coupling without covalently bonding[[,]]

wherein the first functional group is a mercapte group, the second functional group is an amine group, the probe is a nucleic acid and the mercapte group and the amine group are directly bended through ionic

bond, and wherein the probe is imparted to the immebilization substrate using a nozzle, which is instantaneously heated to eject the solvent containing the probe and allows the solvent to fly.

- 15. (Currently Amended) The method of <u>producing immebilizing</u> a probe <u>carrier</u> according to claim 14, wherein the combination of the first functional group and the second functional group comprises an acidic functional group having a dissociation constant of 1.0 X 10<sup>-12</sup> or more and a basic functional group having a dissociation constant of 1.0X10<sup>-6</sup> or more.
- (Currently Amended) The method of <u>producing immebilizing</u> a probe <u>carrier</u> according to claim 14, wherein the probe comprises an oligonucleotide or a nucleic acid.
- (Currently Amended) The method of immebilizing producing a probe carrier according to claim 16, wherein the oligonucleotide or the nucleic acid has the linker at a 3'-terminal or a 5'-terminal thereof.
- (Currently Amended) The method of immebilizing producing a probe carrier according to claim 14, wherein the linker comprises a methylene chain or a polyether chain.
- (Currently Amended) The method of immobilizing producing a probe carrier according to claim 14, wherein the acidic functional group is a mercapto group and the basic functional group is an amino group.
- (Currently Amended) The method of immebilizing producing a probe
   <u>carrier</u> according to claim 14, wherein the basic functional group is one
   selected from the group consisting of a primary amino group, a secondary
   amino group, and a mixture thereof.

## 21-22. (Canceled)

- 23. (Currently Amended) The method of immebilizing producing a probe carrier according to claim 14, wherein the combination of the first functional group and the second functional group is a combination that causes shift of mutual chemical shifts of signals in the NMR spectrum by binding each other.
- 24. (Currently Amended) A method of immebilizing producing a probe carrier having a plurality of probes that are specifically bindable to a target substance on a surface of a substrate to a solid phase-carrier, comprising the steps of:

providing <u>a solution containing</u> a plurality of probes each having a linker containing a first functional group <u>and a silane coupling agent containing a second functional group onto the surface of the substrate as droplets by an inkiet method; and</u>

providing an immobilization substrate having a plurality of second functional groups;

imparting immobilizing the probes [[to]] on the surface of the immobilization substrate, ; and

wherein the surface of the substrate comprises one selected from the group consisting of glass, guartz, silica and a mixture thereof, and

binding the first functional groups of the probes and the second functional groups of the immobilization substrate to each other,

wherein a combination of the first functional group and the second functional group comprises an acidic functional group and a basic functional group, and each bond of the first functional group and the second functional group is in the state of coupling without covalently bonding, and

wherein the first functional group is a mercapte group, the second functional group is an amino group, each of the probes is a nucleic acid and the mercapte group and the amino group are directly bended through ionic bond, and wherein the probes are imparted to the immobilization substrate using a nozzle, which is instantaneously heated to eject the solvent containing the probes and allows the solvent to fly.

25-26 (Cancelled)